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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,816	08/04/2003	Leon Pryor	MS1-1626US	7499

22801 7590 01/09/2007	EXAMINER
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201	SHAH, MILAP

	ART UNIT	PAPER NUMBER
	3714	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	01/09/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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lhptoms@leehayes.com

	Application No.	Applicant(s)
Office Action Summary	10/633,816	PRYOR, LEON
	Examiner	Art Unit	
	Milap Shah	3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 November 2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11 and 13-41* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11 and 13-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some * c)☐ None of:

         1.☐ Certified copies of the priority documents have been received.

         2.☐ Certified copies of the priority documents have been received in Application No. _____.

         3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/6/06*.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

U.S. Patent and Trademark Office

PTOL-326 (Rev. 08-06)   Office Action Summary   Part of Paper No./Mail Date 20061212

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR

1.17(e), was filed in this application after final rejection. Since this application is eligible for continued

examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality

of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed

on November 6, 2006 has been entered.

The Examiner acknowledges that claims 1, 13, 17, 23, 30, 31, 32, 38, & 39 are currently amended,

claim 12 has been canceled, and no new claims have been added. Therefore, claims 1-11 & 13-41 are

currently pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-16 & 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing

to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites multiple phrases which causes the claimed invention to be indefinite. For example,

in line 4, the phrase "at least some of" and in line 5, the phrase "at least in part" are vague, thereby

providing an unknown scope of the claimed invention, for such reasons as "How many or what magnitude

of player-exploitable game conditions cause them to be identified?" Therefore, clarification of claim

language is required.

Claim 4 recites the limitation "cheaters" in line 2. There is insufficient antecedent basis for this limitation in the claim. See Office Action dated September 6, 2006 for details. A similar explanation applies.

Claim 10, which depends from claim 1, recites "terminating a cheater's privileges... ", however, "cheater" appears to be indefinite. There appears to be no proper definition or relation to the identified players of claim 1 and "a cheater" of claim 10. Therefore, the combination of claims 1 & 10 is considered indefinite. The Examiner suggests changing "a cheater's" to "the player's" to properly relate to claim 1. (Just for clarification, in claim 9, "a cheater... " is considered proper because the definition of "a cheater", being one that is exploiting the player-exploitable game condition is provided).

Claim 33 recites the limitation "the logging" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

Claims 1-16 & 23-31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. .

Claims 1 & 23, both recite various steps, which are considered computer processes or procedures, however, neither of the claims appears to produce a tangible result. According to MPEP 2106, a claimed invention must produce a "useful, concrete, and tangible result". The methods of both claims 1 & 23 appear to produce a useful and concrete result, however, neither appear to produce a tangible result. That is, each method, appears to monitor "data", set a threshold for the "data", identify a result based on the "data", but fails to explicitly produce a tangible result based upon the monitoring, thresholds, or identifying steps. Examples of a tangible result include an explicit display of image generation resulting from the determination steps, such as a simple "displaying... " limitation. Therefore, at least claims 1 & 23

are considered to be directed towards non-statutory subject matter. See MPEP 2106 for guidance in

presenting properly draft claims that meet the requirements of 35 U.S.C. 101.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for

the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 3-11, 13, 14, 17-26, 30-34, 38, & 39 are rejected under 35 U.S.C. 102(a) as being

anticipated by the "Valve Anti-Cheat Module" (also known as "Valve Security Module"), created by Valve

Software, in 2002 (hereafter "VAC"), as evidenced by (a) "How Does VAC/VSM work?" by the CSH-

Network, (b) "Valve Bans Online Cheaters" by The Tech Report, (c) "CS Cheaters Beware" posted on

ShackNews, (d) "Online Cheaters Face Game's Ban" by BBC News, and (e) "Cheating in Counter-Strike"

published on Wikipedia.org

Note: The Examiner is relying upon the anti-cheating software developed by "Valve Software",

the company that developed an add-on game called "Counter-Strike" for the popular game called "Half-

Life" (see pages 1-2 of "Online Cheaters Face Game's Ban" by BBC News). The evidentiary references are

used to disclose the features and use of that anti-cheating software.

Claims 1, 4-8, 13, 17, 18, 20, 23-26, 32-34: VAC discloses a method of detecting cheating in an

online multiplayer first person shooting game, including software running on a server that

monitors players in a game for cheating, identifies one or more player exploitable-game conditions,

wherein at least some of the player-exploitable game conditions are produced by the game itself,

and are identified by observing a player's play of the game. VAC also discloses setting a threshold

against which the play of a number of players is compared, wherein the threshold can be modified
in real-time (see "How Does VAC/VSM Work" by CSH-Network, note: the references discloses
detecting cheaters in real-time while playing a game based on monitoring their play and seeing if
the players are using any player-exploitable game conditions to their advantage, including a
"wallhack" in which a threshold is considered to be inherent or set, such that, VAC has to detect
whether part of the enemy model is within the player's point of view, if it is, then the enemy can be
shot at, however, if the enemy is not in the player's point of view and the player is shooting and
hitting him, it can be seen that the player is using a "wallhack" to either shoot through or see
through the walls of the game thereby giving him an advantage; this and other thresholds or
information about player-exploitable game conditions are capable of being updated in real-time,
since all servers running the VAC automatically updates based on the master server, see "How
Does VAC/VSM Work" by CSH-Network). VAC also discloses logging players who are suspected
of cheating, where those that suspected of cheating are those players who exceed set thresholds for
various areas of the game, such as how fast a player should be able to reload, or if the player
should be able to see an enemy player or not (see "CS Cheaters Beware" posted on ShackNews &
page 2 of "Online Cheaters Face Game's Ban" by BBC News).

Regarding claim 17: the VAC software runs on a server, in which the server is a game
apparatus implemented on a computing device having at least a processor, one or more computer
readable media, and VAC is the computer program encoded to perform the cheater detection
methods.

Regarding claim 32: the VAC software is program code that causes a processor to execute
the method discussed above.

Claim 3: VAC is an automatic process at the start of each game and during the game via the server (see "How Does VAC/VSM Work" by CSH-Network).

Claims 9-11, 30, & 38: VAC discloses banning or kicking players that are detected of cheating, off of the server, upon reconnecting the server provides the cheater with a message letting him/her know that they were caught cheating and are banned from all secured servers for a specified time period (see "Valve Bans Online Cheaters" by The Tech Report, note: 24 hour bans at the time the article was written). Upon kicking or banning of a player via VAC, Counter-Strike records and notifies all other players of the ban and/or kick of a player in the player "console".

Claim 14: A possible player exploitable game condition in the game Counter-Strike, which VAC is heavily based upon and incorporated into, is "skywalking", in which a player places himself at a location other then the ground plane within the virtual scene, that is, the player looks like he is walking on an invisible ceiling (see "Cheating in Counter-Strike" published on Wikipedia.org).

Claim 19: According to Applicant's specification an "asynchronous activity pump" provides desired game data relating to the play of the player's in a game to the "play monitor" (i.e. the cheat detection portion or VAC itself), which is inherent in VAC, as it defends against players cheating, in such ways as a player seeing another player through a wall (i.e. the wallhack), wherein data is considered to be continuously sent from both players to server, where VAC checks to make sure player one cannot see player two, if player two is not within the viewing range of player one (see at least "How Does VAC/VSM Work" by CSH-Network).

Claims 21 & 22: The VAC software, as discussed above, resides on the server portion, which is considered as being included on a portion of a network or a portion of a stand-alone computer system, since the server itself is a stand-alone computer system (i.e. the server will still operate the game and processes even with zero players connected).

Claims 31 & 39: VAC discloses that some of the exploitable game conditions modify the game

play, thereby, VAC discloses modifying the game based upon cheaters, since the cheaters are the

ones employing the modifications on the game to cheat (i.e. the discussion about the "wallhack"

cheat from earlier applies here, such that the walls of the game are modified to be transparent or

see-through by the cheater).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of
> this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter
> as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which
> said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2, 15, 16, 27-29, 35-37, 40, & 41 are rejected under 35 U.S.C. 103(a) as being unpatentable

over VAC & evidentiary references (a) through (e) as recited on page 4 of this action, as applied to claims

1, 3-11, 13, 14, 17-26, 30-34, 38, & 39, where applicable.

Claims 2, 15, 16, 27-29, 35-37, 40, & 41: VAC discloses the invention substantially as claimed

except for explicitly disclosing that the monitored "cheats", "player exploitable game conditions",

or thresholds based on said "cheats" are "rate which players acquire virtual property", "rollover of

a player's score", "rollover of a player's expense", or "dupping". However, VAC discloses "cheat"

proofing or monitoring the Counter-Strike game based on such "player exploitable game

conditions" as wallhacks, reloading too fast, stopping recoils, easier head-shots, boosted

connection speeds, etc. (see at least "How Does VAC/VSM Work?" by CSH-Network and

"Online Cheaters Face Game's Ban" by BBC News). Thus, VAC discloses various "player

exploitable game conditions" that Counter-Strike itself may provide to a player, and therefore,

VAC implemented in an environment where virtual property, player's score, player's expense, or dupping, are player exploitable game conditions, would require to be modified to monitor the game for these types of cheats. VAC can be seen to suggest modifications to the software to monitor and defend against new and updated cheats. Therefore, it would have been obvious matter of design choice to one of ordinary skill in the art at the time of the invention to modify VAC based upon the game that VAC is going to "cheat-proof", thus, it would have been obvious to modify VAC's cheat detection portion to monitor virtual property, scoring, expenses, or dupping, when implementing VAC into a game having these areas as possible "player exploitable game conditions". Regarding claims 40 & 41, an indication or logging every time an item is accrued is considered part of the "dupping" player exploitable condition, wherein, VAC is obvious to modified to defend against a "dupping" exploitable game condition.

Response to Arguments

Applicant's arguments with respect to claims 1-11 & 13-41 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Examiner has cited additional VAC and Counter-Strike related non-patent literature documents. The additional references disclose details of both the game of counter-strike and the software that protects it from cheaters (VAC). See Examiner's PTO-892 for citations of the additional non-patent literature.

Any inquiry concerning this communication or earlier communications from the examiner should

be directed to Milap Shah whose telephone number is (571) 272-1723. The examiner can normally be

reached on M-F: 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert

Olszewski can be reached on (571) 272-67888. The fax phone number for the organization where this

application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained from

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CANADA) or 571-272-1000.

M.B.S.

SCOTT JONES
PRIMARY EXAMINER